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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,508	09/22/2003	Stephane Betge-Brezetz	Q77451	5816

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER
CHANKONG, DOHM

ART UNIT	PAPER NUMBER
2152	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/665,508	BETGE-BREZETZ ET AL.
	Examiner	Art Unit	
	Dohm Chankong	2152	.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 9/22/03

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 2

DETAILED ACTION

1>   Claims 1-19 are presented for examination.

2>   This is a non-final rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3>   Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. While the Examiner has done his best to identify all instances of §112 issues, Applicant should also carefully review the claims and amend any unidentified §112 issues.

a.   Claim 1 is rejected for being unclear by reciting "characterized in that *it* includes first calculation means..."; Applicant should more clearly recite the claim element that includes a first calculation means;

b.   Claim 1 is rejected for lacking proper antecedent basis: "the operator";

c.   Claim 5 is rejected for being unclear; claim 5 recites in part "and wherein said service level agreement usage predictive profile from said third data and said service level agreement usage profiles"; this recitation is not a complete sentence and it is unclear what is being claimed;

d.   Claim 9 is rejected for lacking proper antecedent basis: "the network plant"

and "the evolution";

e.   Claim 10 is rejected for lacking proper antecedent basis and for being unclear

and indefinite: "the designation of the disturbed plant"; the "disturbed plant" term

seems to refer to "the network plant liable to be disturbed by the evolution of the

network" (recited in claim 9 on which claim 10 is dependent). However there are two

problems with the statement in claim 9. First, this statement is part of an "if-

statement" meaning that the condition that a network plant being disturbed might not

be fulfilled. Thus, this creates the situation where "the disturbed network" would not

exist if the network can support said optimum configuration. If this is the case, then

claim 10 would be referring to a term that does not exist.

Secondly, the statement simply states that "the network plant *liable*" which

suggests that the plant might not be disturbed even if the network cannot support the

optimum configuration.

f.   Claim 11 is rejected for being unclear; claim 11 recites delivering a "planning

proposal minimizing the costs of network evolution." Claim 11 is dependent on claims

1, 9 and 10. Claims 1 and 10 both recite a planning proposal; it is unclear as to whether

the "planning proposal" in claim 11 is a different planning proposal from those

claimed in claims 1 and 10. Additionally, "the costs" suffers from lacking proper

antecedent basis;

g.   Claim 12 is rejected for being vague and indefinite; claim 12 recites "at least

some of said planning data." This recitation does not clearly identify the scope of the

claim; this language should be amended to more clearly define how much of the

planning data takes the form of planning rules;

h.   Claim 14 is rejected for lacking proper antecedent basis: "the definition of said

third data" and "the display.

4>   Claim 19 is rejected because it is indefinite and fails to conform with current U.S.

practice. It appears to be a literal translation into English from a foreign document and is

replete with grammatical and idiomatic errors.

The claim recites "Use of a method, a processing system (1), and a management

system (2)." It is unclear from this claim language exactly what is being claimed.

Additionally, it recites a processing system and a management system according to claim 1.

However, claim 1 simply recites a system not a processing system or a management system.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
> are such that the subject matter as a whole would have been obvious at the time the invention was made to a
> person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

5>   Applicant's claims rely on some novel terminology such as "network usage predictive

state," "network evolution planning proposal," and "service level agreement usage predictive

profile." The examiner has done his best in interpreting these terms consistent with how

they are defined in the specification.

For the sake of clarity and ease of understanding, it would be beneficial to incorporate

the meanings or definitions of these novel terms into the claims. Of course, Applicant is not

required to follow this suggestion but such clarifications would improve the claims.

6>   Claims 1-8 and 16-19 are rejected under 35 U.S.C §103(a) as being unpatentable over

Duffield et al, U.S Patent No. 6.912.232 ["Duffield"].

7>   As to claim 1, Duffield discloses a system for processing configuration data of a

communication network, characterized in that it includes first calculation means adapted to

determine a network usage predictive state from first data representative of the usage of

resources and/or services within said network [column 10 «line 47» to column 11 «line 21»

where : Duffield's prediction device is analogous to a first calculation means] and second

calculation means adapted to determine a network evolution planning proposal from said

usage predictive state and second data representative of plant of said network [column 11

«line 51» to column 12 «line 30» | column 13 «lines 42-52»] and said first calculation means are

adapted to determine usage profiles of service level agreements between the operator of the

network and customers from said first data and from said service level agreements [column 3

«line 63» to column 4 «line 24» | column 5 «lines 48-67» where : Duffield's hose profile is

analogous to a usage profile].

Duffield does not expressly disclose the exact terms "planning proposal" but

according to Applicant's specification, a proposal simply includes actions to be taken on the network plant (which is simply a device). Duffield discloses adaptively adjusting the network allocations, including increasing or decreasing bandwidth at a network device [column 8 «lines 45-61»]. This functionality recited by Duffield is analogous to the functionality of Applicant's claimed planning proposal.

8>   As to claim 2, Duffield discloses said first calculation means are adapted to determine said network usage predictive state from complementary third data representative of user requirement prediction information [column 3 «line 63» to column 4 «line 23» where : Duffield's QoS requirements are analogous to third data].

9>   As to claim 3, Duffield discloses said first calculation means are adapted to determine a service level agreement usage profile for each service level agreement [column 3 «lines 34-51» : hose profiles].

10>   As to claim 4, Duffield discloses said first calculation means adapted to determine a service level agreement usage predictive profile constituting said network usage predictive state from said service level agreement usage profiles [column 6 «lines 41-53» | column 10 «lines 56-67» where : Duffield discloses aggregating hose profiles; this aggregate profile is analogous to Applicant's claimed predictive profile].

11>   As to claim 5, Duffield discloses the first calculation means are adapted to determine a service level agreement usage predictive profile constituting said network usage predictive state from said service level agreement usage profiles [column 6 «lines 41-53» | column 10 «lines 56-67»]; and wherein

said service level agreement usage predictive profile from said third data and said service level agreement usage profiles [column 6 «lines 41-53» | column 10 «lines 56-67»].

12>   As to claim 6, Duffield discloses said first data is chosen in a group comprising the current usage of resources and/or service of the network and at least a portion of the record of usage of the resources and/or service of said network [column 10 «lines 32-67»].

13>   As to claim 7, Duffield discloses that said first calculation means are adapted to determine said service level agreement usage profiles by means of a trend evolution analysis [column 12 «lines 17-29»].

14>   As to claim 8, Duffield discloses that said third data is chosen in a group comprising the future types of service level agreements and the future evolution of service subscriptions [column 7 «lines 13-15» where : Duffield's reliance on future virtual network usage is analogous to future evolution of service subscriptions].

15>   As to claims 16 and 17, as they do not teach or further define over previously claimed limitations, they are similarly rejected for at least the same reasons set forth for claim 1.

16>   As to claim 18, as it does not teach or further define over previously claimed

limitations, it is similarly rejected for at least the same reasons set forth for claim 2.

17>   As to claim 19, Duffield discloses a method, processing system, and a management

system according to claim 1 in networks chosen in a group comprising Internet, MPLS, ATM

and Frame Relay networks [column 1 «lines 44-54»].

18>   Claims 9-13 and 15 are rejected under 35 U.S.C §103(a) as being unpatentable over

Duffield, in view of Lewis et al, U.S Patent No. 6.421.719 ["Lewis"].

19>   As to claims 9 and 13, Duffield discloses said calculation means including traffic

engineering means adapted to determine an optimum configuration of the network from said

second data describing the plant of said network and a usage predictive state and predictive

state validation means adapted to supply said traffic engineering means with said predictive

state delivered by said first calculation means [column 7 «line 16» to column 8 «line 61»].

        Duffield does not expressly disclose that on receiving an optimum configuration

associated with said predictive state to determine whether said network can support said

optimum configuration and then, if it cannot, to determine the network plant liable to be

disturbed by the evolution of the network corresponding to said predictive state.

20>   Lewis discloses on receiving an optimum configuration associated with said predictive

state to determine whether said network can support said optimum configuration and then, if

it cannot, to determine the network plant liable to be disturbed by the evolution of the

network corresponding to said predictive state [column 5 «lines 10-19» | column 15 «lines 14-

25» | column 16 «lines 23-28»].

It would have been obvious to one of ordinary skill in the art to incorporate Lewis'

teachings of verifying optimized configurations at network devices to insure that they are

operating properly into Duffield's network management system. Such a feature improves

Duffield because it enables an operator to verify that configuration commands had been

performed by the device and to determine whether the improvement of the device has

actually improved.

21>   As to claim 10, Duffield discloses said second calculation means including planning

determination means connected to a planning database and adapted to determine said

planning proposal from the designation of the disturbed plan and said planning data from

said database [column 11 «lines 51-65» | column 12 «lines 17-52»].

22>   As to claim 11, Duffield discloses that said planning determination means are adapted

to deliver a planning proposal minimizing the costs of network evolution [column 1 «lines

64-67» | column 2 «lines 14-21» where : Duffield discloses achieving network efficiency which

is analogous to minimizing costs].

23>   As to claim 12, Duffield discloses that at least some of said planning data takes the

form of planning rules [column 11 «lines 30-32» where : SLA parameters are analogous to

planning rules].

24>   As to claim 15, Duffield does not disclose a GUI. It should be noted however that the

claim language "adapted to enable the definition of said third data...and the display of each

planning proposal" and "to enable an operator to monitor the validation of planning

proposals" does not limit the claim's scope because this language is merely directed towards

the intended use of the GUI. See MPEP §2111.04. Only those claim elements that affect the

structure of the claimed invention are given patentable weight. In other words, as long as a

prior art reference teaches a GUI, definition of the third data, a planning proposal and

validation of planning proposals, it is capable of the functionality of displaying those features

as claimed by applicant.

25>   Lewis discloses a GUI adapted to enable the definition of third data by an operator

and the display of a planning proposal, wherein said GUI is adapted to enable an operator to

monitor the validation of planning proposals [Figure 1B | column 5 «lines 10-19» | column 6

«lines 5-24»]. It would have been obvious to one of ordinary skill in the art to have

incorporate Lewis's GUI functionality into Duffield's network management system. One

would have been motivated to make such a combination to improve Duffield by providing an

interface to define and view network information as taught by Lewis.

26>   Claim 14 is rejected under 35 U.S.C §103(a) as being unpatentable over Duffield, in view of Mangipudi et al, U.S Patent No. 7.058.704 ["Mangipudi"].

27>   As to claim 14, Duffield does not expressly disclose a graphical user interface. It should be noted however that the claim language "adapted to enable the definition of said third data...and the display of each planning proposal" does not limit the claim's scope because this language is merely directed towards the intended use of the GUI. See MPEP §2111.04. Only those claim elements that affect the *structure* of the claimed invention are given patentable weight. In other words, as long as a prior art reference teaches a GUI, it is capable of the functionality as claimed by applicant.

28>   Mangipudi discloses a GUI adapted to enable the definition of third data by an operator and the display of a planning proposal [column 8 «lines 11-42»]. It would have been obvious to one of ordinary skill in the art to have incorporate Mangipudi's GUI functionality into Duffield's network management system. One would have been motivated to make such a combination to improve Duffield by providing an interface to define and view network information as taught by Mangipudi.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Lebourges, U.S Patent No. 5.463.686;

Klinker et al, U.S Patent Publication No. 2002|0145981;

Ullmann et al, U.S Patent Publication No. 2002|0172222;

Chan et al, U.S Patent No. 6.885.641;
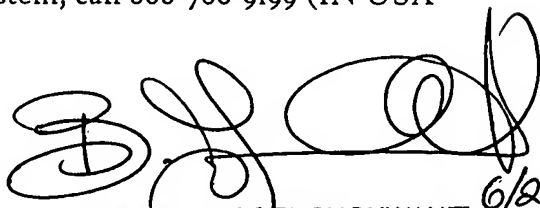
Byrnes, U.S Patent No. 7.065.573;

Chen et al, U.S Patent No. 7.161.942.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942. The examiner can normally be reached on Monday-Friday [8:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC

BUNJOB JAROENCHONWANIT   6/25/7
SUPERVISORY PATENT EXAMINER